

PONOMARENKO P. A.

*Prevention of occupational myopia in weavers employed in the Orekhovo-Zuev Weaving Mill
(Russian text) VESTN. OPTALM. 1953, 32/1 (42-45) Tables 1 illus. 1

The author refracted 508 weavers who were continually putting the threads through a small hole in the loom at a very fast tempo. He found 34% of myopes in this group, the degree of myopia increasing in proportion to the length of time of work. In the other groups of workers who did not strain their eyes as much as the above mentioned group, myopia was observed only in 9%. This indicates that the chief cause of the myopia is eye strain. The suggestions made by the author for preventing myopia are as follows: (1) careful selection of workers with good visual acuity for close work, (2) radical improvement of illumination of the factories, with the introduction of daylight bulbs. (3) installation of comfortable, moveable or sliding seats, (4) frequent refraction and prescription of proper glasses, (5) further observation of the effectiveness of these measures.

Sitchovska-New York (XII, 4)

SO: Excerpta Medica
Section IV Vol 7 No. 9

PCNOMARENKO, Panteleymon Kondratyevich, 1932-

Rankov, V. A., Electric locomotives. 4. perer. izd. Moskva, Gos. transp. zhel-dor. izd-vo, 1952. 723 p. (53-27636)

TF975.R3 1952

PONOMARENKO, P.K.; YASNOV, M.A.; NESMEYANOV, A.N.; VORONKOV, A.V.; PETROVSKIY,
N.G.

Opening the new buildings of the Moscow State University. Vest.Mosk.un.8
no.9:5-15 S '53. (MLRA 6:11)

(Moscow University--Buildings)

Ponomarenko, P. K.

7747 V Bor'be za osushchestvleniye vsenarodnoy zadachi po uvelicheniyu
proizvodstva terna. (Kazakh. SSR). Alma-ata, Kazgosizdat, 1954.
16s. 20sm. 5,000 ekz. 15k. -Per Stat'i iz gaz "Pravda" ot 27 okt
1954 g. Na uygur. yaz - (55-3828)
338.1:633.1 + 631.61 (584.6)

SO. Knizhnaya Letopis', Vol. 7, 1955

PONOMARENKO, Panteleymon Kondrat'yevich; RAKOV, Vitaliy Aleksandrovich;
SHILOVSKIY, V.A., redaktor; YUDZON, D.M., tekhnicheskii redaktor

[Electric locomotives] Elektrovoz. Izd. 5-oe, perer. Moskva, Gos.
transp.zhel-dor. izd-vo, 1956. 627 p. (MLRA 9:11)
(Electric locomotives)

PONOMARENKO, P.N.

Data obtained from field studies of the climate in the various regions
of Kirghizistan. Izv. AN Kir. SSR. Ser. est. 1 tekhn. nauk 4 no.4:27-37
'62. (MIRA 16:4)

(Kirghizistan—Climate)

PONOMARENKO, P.N.

Some data on solar radiation in the glacier region; upper section
of the Chong-Kyzylsu Basin on the northern slope of the Terskei
Ala-Tau. Mat. gliats. issl. no.2:121-142 '60. (MIRA 14:11)
(Chong-Kyzylsu Valley--Solar radiation)

ONOMARENKO, P.V.

Research of many years done by senior students on the summer
planting of potatoes. Folitskh.obuch. no.6:28-30 Ja '59.
(MIRA 12:12)

1. Bobrinetskaya srednyaya shkola No.1 Kirovogradskoy
oblasti USSR.
(Agriculture--Study and teaching)
(Potatoes)

PONOMARENKO, P.V., agronom, prepodavatel' (Kirovogradskaya oblast',
Ukrainskaya SSR); MASYURA, P.D., agronom (Kirovogradskaya oblast',
Ukrainskaya SSR)

Planting potatoes in summer in Kirovograd Province. Agrobiologiya
no.3:448-450 My-Je '59. (MIRA 12:9)

1. Bobrinetskaya sel'skokhozyaystvennaya shkola No.1 (for Ponomarenko).
 2. Kolkhoz imeni Kominterna (for Masyura).
- (Kirovograd Province--Potatoes)

Ponomarenko
USSR/Cultivated Plants - Potatoes, Vegetables, Melons.

M-3

Abs Jour : Ref Zhur - Biol., No 3, 1958, 10800

Author : Ponomarenko, P.V.

Inst : -

Title : The Best Dates for Summer Potato Sowing.

Orig Pub : Kolgospnik Ukraini, 1957, No 6, 35-36

Abstract : No abstract.

Card 1/1

12

1ST AND 2ND GROUPS																										3RD AND 4TH GROUPS																									
PROCESSING AND PROPERTY DATA																										PROCESSING AND PROPERTY DATA																									
<p>Comparative evaluation of the softening agents used in the preparation of casein-coloring compositions for coating leather. S. P. Zel'din and R. Posnermanko. <i>Org. Chem. Ind. (U. S. S. R.)</i> 3, 224 (1967). The best results in plasticizing casein-pigment films on leather were obtained with the use of glycerol and a soln. of soap in glycerol. Castor oil gave the most inferior results with alizarin oil occupying the intermediate position. Because of the poor homogenizing properties of glycerol, the casein-color pastes are best made with alizarin oil. To obtain a lasting elastic pigment film the paste is mixed with a little glycerol just before its application to leather. Pigments and dyes in casein-color coatings of leather. S. P. Zel'din. <i>Ibid.</i> 410-19. Tests in prepn., application and properties of casein-color pastes from org. and inorg. coloring matter for surface coating of leather in white, black and various shades of brown are discussed. Chas. Blane</p>																										<p>29</p>																									
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33001 579-8314																										33221 83417																									
33002 579-8314																										33221 83417																									

TYURIN, S.T.; PONOMARENKO, R.A.

Results of the determining of the activity of polyphenolase
in dry wine materials prepared without the access of air.
Trudy VNIIViV "Magarach" 13:60-67 '64.

(MIRA 17:12)

PONOMARENKO, R.M.

Studying osmosis and diffusion in cucumber preserves. Kons. 1
ov.prom. 18 no.9:5-7 S '63. (MIRA 16:9)

1. Krasnodarskiy nauchno-issledovatel'skiy institut pishchevoy
promyshlennosti.

(Canning and preserving)
(Cucumbers--Analysis and chemistry)

SOV/137-57-6-10504

Translation from: Referativnyy zhurnal, Metallurgiya, 1957, Nr 6, p 157 (USSR)

AUTHORS: Kotlyar, I.Kh., Ponomarenko, R.M.

TITLE: Selection of Grades of Stainless Steels for the Manufacture of
Tomato-canning Equipment (Vybor marok nerzhaveyushchikh staley,
prigodnykh dlya izgotovleniya oborudovaniya tomatnogo proizvodstva)

PERIODICAL: Tr. Vses. n.-i. in-t konserv. i ovoshchesushil'n. prom-sti, 1956,
Nr 6, pp 61-67

ABSTRACT: The corrosion resistance (CR) of grades EYal-T, Yal-T, and
Zh-1 stainless steels in various tomato media was investigated as
well as the effect of the contact of stainless steel and copper on the
CR of steel. A part of the specimens was tested with a welding
seam of the same grade steel. CR was determined by the loss in
weight. The steels investigated are fairly resistant to tomato pro-
ducts of various concentrations. The welding seams possess the
same CR as the parent metal. CR of steel in sulfite-treated tomato
pulp containing 0.2% H_2SO_3 proved inadequate, and therefore the
grades investigated cannot be recommended for use in equipment
for processing sulfite-treated products.

N.K.

Card 1/1

PONOMARENKO, R.M.

· Rapid method for determining the amount of copper salts in canned foods. Kons. i ov. prom. 13 no.4:43-45 Ap '58. (MIRA 11:4)

1. Krasnodarskiy nauchno-issledovatel'skiy institut konservnoy promyshlennosti.

(Food--Analysis) (Copper salts--Analysis)

PNOMAREV, S.

Measures contemplated by the State Training and Pedagogical
Literature Publishing House for the provision of schools with
textbooks and books of problems in mathematics. Mat. v shkole
no.6:84 H-D '59. (MIRA 13:3)
(Mathematics---Textbooks)

1ST AND 2ND ORDER																										3RD AND 4TH ORDER																									
COMMON ELEMENTS																										COMMON VARIABLES INDEX																									
<p style="text-align: center;">PROCESS AND PROPERTIES INDEX</p> <p style="text-align: right;">B-I-8</p> <p style="text-align: left;">Bc</p> <p style="text-align: center;"> Determining small amounts of carbon monoxide under existing conditions. S. PENCARNEGO (Ukr) Vestnik, 1955, 8, No. 4, 11-12. 0.005% of CO is determined in a portable apparatus, utilizing the temp. rise due to oxidation of CO on a heptakis catalyst. H₂O, CO₂, H₂S, and NO₂ are first removed by absorbents. (U. S. S. R.) </p> <p style="text-align: center;">ASD. S. L. A. METALLURGICAL LITERATURE CLASSIFICATION</p>																																																			
COMMON ELEMENTS																										COMMON VARIABLES INDEX																									

FLEYSHMAN, S.M.; TSELIKOV, F.I.; KRUTIKOV, V.I., inzh., red. [deceased];
PONOMARENKO, S.A., red.; BOBROVA, Ye.N., tekhn.red.

[Rock cuts with catch trenches along tracks] Skal'nye vyemki s
putevymi ulavlivaiushchimi transheiami. Moskva, Izd-vo "Transport,"
1963. 73 p. (Babushkin. Vsesoiuznyi nauchno-issledovatel'skii
institut transportnogo stroitel'stva. Trudy no.52). (MIRA 17:3)

GORN, Aleksandr Grigor'yevich, inzh.; LISKOVETS, Simon Abramovich, inzh.;
CHERNYAK, Solomon Natanovich, inzh.; SHAPIRO, Iosif Abramovich,
inzh.; PONOMARENKO, S.A., red.; BOBROVA, Ye.N., tekhn.red.

[Experience in the demonstrative building of railroads] Opyt pokazatel'nogo stroitel'stva zheleznykh dorog. Moskva, Vses.izdatel'sko-poligr.ob"edinenie M-va putei soobshchenia, 1960. 143 p.
(MIRA 13:5)

(Railroads--Construction)

TELYATNIKOVA, G.N.; PONOMARENKO, S.F.

Elimination of the sparseness of stand is an important contributing factor for increasing strawberry yield. Kons. i ov. prom. 14 no.7: 22-24 J1 '59. (MIRA 12:9)

1. Moskovskoye otdeleniye Vsesoyuznogo instituta rasteniye-vodstva (for Telyatnikova). 2. Sovkhoz "Bogucharovo" Tul'skoy oblasti (for Ponomarenko). (Strawberries)

PONOMARENKO, S.F.

Periods during which strawberry plantations are cultivated.

Kons.i ov.prom. 16 no.3:32-33 Mr '61. (MIRA 14:3)

1. Sovkhoz "Bogucharovo" Tul'skoy oblasti.
(Strawberries)

GLAZOVA, O.P.; PONOMARENKO, S.I.

Causes of errors in weather forecasts for Moscow in 1958-1959.

Trudy TSIP no.112:3-17 '61.

(MIRA 14:5)

(Moscow--Weather forecasting)

ACC NR: AT6032984

SOURCE CODE: UR/2546/66/000/149/0039/0045

AUTHOR: Ponomarenko, S. I.

ORG: none

TITLE: Refinements in the prediction of thunderstorms by the Lebedeva and Faust methods

SOURCE: Moscow. Tsentral'nyy institut prognozov. Trudy, no. 149, 1966. Rezul'taty ispytaniy razlichnykh sposobov kratkosrochnykh prognozov pogody (Results of analyses of various short-range weather forecasting methods), 39-45

TOPIC TAGS: synoptic meteorology, weather forecasting, storm

ABSTRACT: This study of the Lebedeva and Faust methods for weather forecasting was conducted to determine causes of errors in storm prediction and to devise refinements to improve forecasting accuracy. Examination of selected diagnostic material showed that data on temperature and dew point deficits at ground level and at higher altitudes was required in order to improve the accuracy of forecasts in anticyclones, especially by the Lebedeva method. Charts were constructed showing the probabilities of thunderstorms at the fronts and backs and warm sectors of cyclones and in anticyclones as functions of dew point deficits and temperature fluctuations or temperature differences in the various isobaric levels. According to these charts conditions for

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Card 2/2

ACC NR: AT6032983

SOURCE CODE: UR/2546/66/000/149/0003/0038

AUTHOR: Penomarenko, S. I.; Koshel'kova, G. A.; Mukhina, P. A.

CRG: none

TITLE: Results of examining different methods of forecasting thunderstorms

SOURCE: Moscow. Tsentral'nyy institut prognosov. Trudy, no. 149, 1966. Rezul'taty ispytaniy razlichnykh sposobov kratkoesrochnykh prognosov pogody (Results of analyses of various short-range weather forecasting methods), 3-38

TOPIC TAGS: storm, synoptic meteorology, weather forecasting

ABSTRACT: The article summarizes and evaluates methods of forecasting thunderstorms proposed by Lebedeva, Slavin, Bailey, Whiting, Cox and Faust. Evaluation of their reliability and accuracy shows that all six methods are practical, but it is difficult to determine which method is better since they give different results under different conditions. If the forecast objective is to obtain accurate warnings of storm presences, the Whiting method is most successful since the proportion of storm occurrences when none were forecast is least. However, the overall correctness of the Whiting method is low. When the objective is reliable forecasting of the presence or absence of storms the Lebedeva and Faust methods are better. The occurrence of storms within a 100-150 km radius is forecast by all methods fairly successfully—81-83%.

Cord 1/2

ACC NR: AT6032983

For a limited area (within 50 km of the station) the overall accuracy of the Faust and Lebedeva methods is highest—82-78%. As the distance is increased to 100-200 km the overall correctness of these methods drops sharply while that of the Slavin, Bailey and Whiting methods increases. Thunderstorms can be forecast more successfully in cyclones and on fronts, especially on cold fronts, than in anticyclones and backs and in warm sectors of cyclones. "Junior Research Associate N. E. Minakova took part in the work in addition to the authors of this article." Orig. art. has: 15 tables, 4 figures and 5 equations.

SUB CODE: 04/ SUBM DATE: none/ ORIG REF: 007/ OTH REF: 004

Card 2/2

PONOMARENKO, V.A.

PHASE I BOOK EXPLOITATION

80V/5606

Petrov, Aleksandr Dmitriyevich, Vladimir Florovich Mironov, Vasilii Andreyevich Ponomarenko, and Yevgeniy Andreyevich Chernyshev

Sintez kremniyorganicheskikh monomerov (Synthesis of Organosilicon Monomers)
Moscow, Izd-vo AN SSSR, 1961. 550 p. Errata slip inserted. 4,500 copies printed.

Sponsoring Agency: Akademiya nauk SSSR. Institut organicheskoy khimii im. N. D. Zelinskogo.

Resp. Ed.: A. V. Topchiyev, Academician; Ed. of Publishing House: L. S. Povarov;
Tech. Eds.: V. G. Laut and I. A. Streletskiy.

PURPOSE: This book is intended for chemists and graduate students of chemistry and related fields and may be used as a handbook by engineers interested in the synthesis and properties of polymeric materials.

COVERAGE: The book gives the results of the authors' research on the synthesis of monomeric organosilicon compounds and reviews data published through 1960

Card 1/13

Synthesis of Organosilicon Monomers

SOV/5606

on methods of synthesis and properties of the more important and widely used organosilicon monomers. The Introduction and Chs. I, II, and IV were written by A. D. Petrov; Ch. III and Part III by Ye. A. Chernyshev; Ch. V, jointly by Chernyshev and Mironov; Part II by V. F. Mironov; and Part IV by V. A. Ponomarenko. The Conclusion was written by Petrov, Mironov, and Chernyshev. The authors thank R. Kh. Freydlina, Corresponding Member, AS USSR, and M. G. Voronkov, Candidate of Chemical Sciences. There are 142 references: 92 Soviet, 44 English, 1 Italian, 2 French, and 3 German.

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Synthesis of Organosilicon Monomers

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AVAILABLE: Library of Congress (QD412.S6S5)

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JA/dfk/mas
11-1-61

L 09132-67 INT(1)/INT(1) (1) (c) CH/BA

ACC NR AP6029524

SOURCE CODE: 00/0432/66/000/004/0062/0062

AUTHOR: Bobreshov, Yo. N.; Darova, P. I.; Ponomarenko, V. A.; Sergeyev, I. V. 77

ORG: None

TITLE: A computer distribution loop system with binary cells

SOURCE: Mekhanizatsiya i avtomatizatsiya upravleniya, no. 4, 1966, 62

TOPIC TAGS: computer circuit, computer control system, *circuit design, flip flop circuit, transistorized circuit*

ABSTRACT: A computer distribution system with a scaling factor twice higher than the number of cells is described with the help of a circuit diagram. It is mentioned that an application, No. 943983/26-24, for a patent covering this arrangement was presented by P. I. Darova. The system shown in a diagram consists of three flip-flop circuits having a scaling factor equal to 6. The system operates by using transistors for consecutive switching of pulses to the corresponding coincidence output units. The interconnecting operation of three flip-flop circuits are briefly explained. It is expected that the proposed system will find a wide application in designing various distributing, coding and decoding arrangements. Orig. art. has: 1 diagram.

SUB CODE: 09/ SUBM DATE: None/ ORIG REF: 003

Card 1/1

UDC: 621.374.3

PONOMARENKO, S.F.

Strawberry yeild in one-year old plantations. Kons.i ov.prom. 16
no.4:38-39 Ap '61. (MIRA 14:3)

1. Sovkhoz "Begucharova" Tul'skoy oblasti.
(Tula Province—Strawberries)

РЕЗУЛЬТАТЫ РАБОТЫ
PASHUTA, I.F.; PONOMARENKO, S.F.

Producing large berry harvests. Kons. 1 ov. prom. 12 no.11:39-41
N '57. (MIRA 11:1)

1.Sovkhoz "Bogucharovo".
(Berries)

AVERINA, L.I.; PONOMARENKO, S.F.

Growing high-quality strawberry planting stock. Kons. i ov. prom.
14 no.5:31-33 My '59. (MIRA 12:6)

1. Moskovskoye otdeleniye instituta rasteniyevodstva (for Averina).
2. Sovkhoz "Bogucharovo" Tul'skoy oblasti (for Ponomarenko).
(Strawberries)

PONOMARENKO, S.I.

PONOMARENKO, S.I.

Synoptic and aerological conditions for the development of thunder-
storms in the warm front. Trudy TSIP no.60:96-107 '57.

(MIRA 11:3)

(Thunderstorms)

ACC NR: AR6035074

SOURCE CODE: UR/0169/66/000/008/B061/B062

AUTHOR: Ponomarenko, S. I.; Koshel'kova, G. A.; Mukhina, P. A.

TITLE: Results of tests of various means of forecasting thunderstorms

SOURCE: Ref. zh. Geofizika, Abs. 8B431

REF SOURCE: Tr. Tsentr. in-ta prognozov, vyp. 149, 1966, 3-38

TOPIC TAGS: storm, cyclone, weather forecasting, weather station, meteorology

ABSTRACT: The testing methods of forecasting thunderstorms by the Lebedeva, Slavin, Beyli, Whiting, Koks, and Faust techniques was made from June to August 1963 in the Central Forecasting Institute according to data from 18 stations in the European USSR. From 75 to 92 forecasts were developed for each station, and a total of 1334 to 1656 forecasts were developed by various methods. The basic elements of each method are presented. Tests have shown that according to criteria N (reliability) and Q (accuracy), all six methods are effective in practice. But according to these criteria it is difficult to decide which of the methods is

UDC: 551.509.326

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ACC NR: AR6035074

better, because in different cases they give different results. In the presence of a thunderstorm, the more successful method was found to be that of Whiting, and as a secondary choice—those of Lebedeva and Faust. But according to the Whiting method, thunderstorms are frequently forecast but are not observed, and the evaluation was found to be the lowest (23 percent), but forecasts made according to the methods of Lebedeva and Faust, had an evaluation of 32 and 40 percent, respectively. The total justification of thunderstorms and lack of it is also very low according to the method of Whiting (53 percent); it is of 80 to 82 percent according to the methods of Lebedeva and Faust. All methods, particularly those of Faust, Lebedeva, and Koks, forecast relatively successfully (81—83 percent) the presence of a thunderstorm in a radius of 100—150 km. In a small region (of the station), thunderstorm forecasting is an extremely difficult problem. Only three methods (those of Lebedeva, Faust, and Koks) were found to be better than inertial forecasts. The absence of a thunderstorm is forecast with relative reliability by all methods. A higher general justification in a small region (of the station, and within a 50-km radius), were forecasts calculated by the methods of Faust (82 percent), Lebedeva (80 percent), and Koks (78 percent). With an increase in the distance (in a 100—200-km radius), the general justification of forecasts by these methods decreases sharply, but increases for the methods of Slavin, Beyli, and Whiting. The general justification of the forecasts for a

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ACC NR: AR6035074

100—200-km radius by the methods of Slavin, Beyli, and Whiting still remains less successful than according to the methods of Lebedeva, Faust, and Koks in a radius of up to 50-km. Thunderstorms in cyclones and on fronts, especially on cold fronts, are forecast more successfully than in anticyclones, in the rear, and in the warm sector of the cyclone. Z. Makhover. [Translation of abstract]

[GC]

SUB CODE: 04/

Card 3/3

L 43013-65 EWT(1)/FCC GW

ACCESSION NR: AP5005/69

S/0050/65/000/004/0022/0024

AUTHOR: Ponomarenko, S. I. (Candidate of geographical sciences) 10

TITLE: On thunderstorm predictions and the possibilities of their improvement L

SOURCE: Meteorologiya i gidrologiya, no. 4, 1965, 22-24

TOPIC TAGS: weather forecasting,¹² meteorology, atmosphere, storm

ABSTRACT: The work of various meteorologists in the prediction of severe storms in

L 43013-65

ACCESSION NR: AP5008769

using earlier methods. The author expresses the opinion that even higher prediction accuracies may be reached if emphasis is placed on obtaining accurate and more exact methods.

ASSOCIATION: Tsentral'nyy institut prognozov (Central Forecasting Institute)

SUBMITTED: 16Oct64

ENCL: 00

SUB CODE: ES

NO REF SOV: 005

OTHER: 004

llc
Card 2/2

PONOMARENKO, S.I., kand.geograf.nauk

Thunderstorm forecasts and possibilities of improving them.
Meteor. i gidrol. no.4:22-24 Ap '65. (MIRA 18:4)

1. TSentral'nyy institut prognozov.

PONOMARENKO, S.I.

Stratification of the atmosphere in the field of warm fronts.

Trudy TSIP no.125:36-44 '63.

(MIRA 16:12)

PONOMARENKO, S.M.

Results of the work of the Khorol Intercollective Farm Fattening
Station. Veterinariia 37 no.7:21-24 J1 '60. (MIRA 16:2)

1. Zaveduyushchiy Khorol'skoy meshrayonnoy veterinarno-bakterio-
logicheskoy laboratoriyey.
(Khorol District—Feeding)

PONOMARENKO, S. S.

A penny saved is a penny earned. Mekh. sil'. hosp. 14 no.1:
9-10 Ja '63. (MIRA 16:4)

1. Upravlyayushchiy Katerinopol'skim rayonnym otdeleniyem
"Sil'gosptekhniki", Cherkasskoy oblasti.

(Ukraine—Tractors—Maintenance and repair)

PONOMARENKO, V.

AUTHOR: Nesis, K. and Ponomarenko, V. (Murmansk) 4-58-4-8/19

TITLE: The Angler Fish (Ryba udil'shchik)

PERIODICAL: Znaniye - Sila, 1958, Nr 4, p 23 (USSR)

ABSTRACT: The authors describe how the Soviet trawler "Stalinabad", when trawling at over 400 meters depth off Newfoundland, pulled in a lot of perch and one unusual fish about one-half meter long. It was sooty black with a vast mouth and had two thin threads or antennae suspending little balls above it. This was the rare angler-fish. There are 2 sketches.

AVAILABLE: Library of Congress

Card 1/1

S/020/60/132/06/12/068
C111/C222

AUTHOR: Ponomarev, V.

TITLE: Normal Spaces as Images of a Zero-Dimensional One

PERIODICAL: Doklady Akademii nauk SSSR, 1960, Vol. 132, No. 6, pp. 1269-1272

TEXT: Principal theorem : Every normal space X with the weight τ is an image of a zero-dimensional (in the sense of the small inductive dimension ind) set $D \subseteq D^\tau$ for a certain continuous closed bicomact irreducible mapping.

D^τ denotes the "generalized Cantor discontinuum of the weight τ ".

Addition : Since $D \subseteq D^\tau$, the weight of D is not greater than τ ; since X is normal, so is D .

There are 2 references : 1 Soviet and 1 American.

PRESENTED: March 29, 1960, by P.S. Aleksandrov, Academician

SUBMITTED: March 21, 1960

✓ B

Card 1/1

S/018/62/000/011/001/001
D047/D112

AUTHORS: Sukhomlin, I., Guards Colonel, and Ponomarenko, V., Guards Senior Engineer-Lieutenant

TITLE: A new method of decontaminating tanks

PERIODICAL: Voyenny vestnik, no. 11, 1962, 109-110

TEXT: A device is described for the decontamination of tanks from radioactive matter. It was invented in the authors' subunit and has been successfully tested in field conditions. The device consists of an ordinary MZA-3 (MZA-3) fuelling unit provided with a sprayer. Fuel or a special decontaminating solution from an outer container is used as the decontaminating agent. About 30 liters of fluid are sufficient for decontaminating one tank in 15 minutes. The fluid is sprayed on the tank under a pressure of 0.7-1 atm. When using fuel from an outer fuel tank, the latter must be uncoupled and rolled up to the turret, since the hose of the MZA-3 is only 5500 mm long and cannot reach the front of the tank. There are 2 figures.

Card 1/1

POHOMARENKO, V.A., inzh.

Theory and practice of plotting turns with small radius curves.
Shor.DonUGI no.17:3-85 '58. (MIRA 12:5)
(Railroads--Curves and turnouts) (Nine railroads)

K

■ **COUNTRY** : U.S.S.R.
CATEGORY : FORESTRY, FOREST CULTURES.
ABS. JOUR. : Ref Zhur-Biologiy. No.1, 1959, No. 1483
AUTHOR : Khristeva, L.A.; Ponomarenko, V.A.;
INST. : Kharkov Univ. ~~Kotlyarskiy, V.O.~~
TITLE : Effect of Humic Fertilizers on the Growth of
 Pine, the Chief Afforestation Culture of
 the Lower Dnieper Sands.
ORIG. PUB. : V sb.: Lumbroze udobreniya. Iher'kov
 Khar'kovsk. un-t, 1957, 313-330
ABSTRACT : By experiments at the Golopristsanskij Les-
 khoz(1953), it was established that humic
 fertilizers raise the vitality and drought-
 resistance of pine in the lower Dnieper sands.
 It is recommended that in nurseries humophos
 and watering with a 0.001 % solution of sodium
 humate be applied in combination with
 supplementary mineral fertilizers. It is
 expedient to activate planting material of
 a different district by wetting the root system

CARD: 1/2

COUNTRY :
CATEGORY :

ABS. JOUR. : RUS. ZHURN. - BIOLOGIYA, NO.1, 1959, 1467

AUTHOR :

INST. :

TITLE :

ORIG. PUB. :

ABSTRACT : of seedlings in an 0.002 % solution of
sodium humate and in a mixer of humophos.

... I. V. Nemelev

CARD: 2/2

PONOMARENKO, V.A.; KRAVCHINSKIY, S.Yu.

Experiment in increasing the capacity of underground transportation
in the Donets Basin mines. Ugol' 35 no.6:34-36 Je '60.

(MIRA 13:7)

1. Donetskiy ugol'nyy institut.
(Donets Basin--Mine haulage)

PONOMARENKO, V.A. (Voronezh)

Effective mass improvement of health conditions. Sov.zdrav. 21
no.7:42-43 '62. (MIRA 15:8)

1. Iz Voronezhskoy oblastnoy klinicheskoy bol'nitsy (glavnyy vrach -
prof. V.P.Radushkevich).
(VORONEZH PROVINCE--EXERCISE)

PONOMARENKO, V.A.; ASTAKHOV, A.V., red.izd-va; OVSEYENKO, V.G.,
tekhn. red.; MINSKER, L.I., tekhn. red.

[Potentials of the traffic capacity of underground transportation] Rezervy propusknoi sposobnosti podzemnogo transporta. Moskva, Gosgortekhzdat, 1962. 266 p. (MIRA 16:4)
(Mine haulage)

PONOMARENKO, V. A., Candidate of Tech Sci (diss) -- "Some problems in the theory and practice of building passages with small-radius curves". Stalino-Dnepropetrovsk, 1959. 22 pp (Min Higher Educ Ukr SSR, Dnepropetrovsk Order of Labor Red Banner Mining Inst im Artem), 150 copies (KL, No 21, 1959, 116)

PONOMARENKO, V.A., kand. tekhn. nauk

Studying the reinforcement of a rope in the coupling by means
of pouring an alloy on its ends. Vop. rud. transp. no.5:
380-389 '61. (MIRA 16:7)

1. Donetskij nauchno-issledovatel'skiy ugol'nyy institut.
(Wire rope)

POCHARENKO, V. A.

"Synthesis and Properties of Certain Hydrocarbons of the C₁₂ - C₁₈ Compositions."
Thesis for degree of Cand. Chemical Sci.

Sub 15 Dec 50, Moscow Order of Lenin
Chemicotechnological Inst imeni D. I. Mendeleyev

Summary 71. 4 Sep 52, Dissertations Presented for Degrees in Science and Engineering in Moscow in 1950. From Vechernyaya Moskva.
Jan-Dec 1950.

CA PONOMARENKO, V.A.

Synthesis of symmetric tetraisopropylethane. A. D. Petrov and V. A. Ponomarenko. *Doklady Akad. Nauk S.S.S.R.* 74, 730-732 (1959). Dehydration of $(\text{Me}_2\text{CH})_2\text{C}(\text{OH})_2$ by heating to 150° with CuSO_4 gave largely the oxide, $\text{CuI}(\text{Me})$, m. 21.5° , n_D^{20} 1.4040, d_4^{20} 0.8000, as well as a small amt. of isomeric oxide, b. 71° , n_D^{20} 1.4035, d_4^{20} 0.8270, and octaisopropyl-p-dioxane, m. 118° . 2,5-Dimethyl-4,4-di- and octaisopropyl-p-dioxane, m. 118° . 2,5-Dimethyl-4,4-di-isopropyl-3-hexanone, b. 98° , d_4^{20} 0.8083, n_D^{20} 1.4505, which failed to react with $1-\text{C}_6\text{H}_5\text{MgBr}$, was prepd. from the oxide and H_2SO_4 . Heating $1-\text{C}_6\text{H}_5\text{Li}$ with iso- Pr_2CO in Et_2O gave 20% diisopropyl(1-naphthyl)carbinol, b. $141-4^\circ$, d_4^{20} 1.0696, n_D^{20} 1.5808, which with CuSO_4 to $100-30^\circ$ gave 2,4-dimethyl-3-naphthyl-2-pentene, b. 120° , d_4^{20} 0.8720, n_D^{20} 1.5914. Chlorination of the dehydration product of $(\text{Me}_2\text{CH})_2\text{CHOH}$ gave $\text{C}_7\text{H}_{11}\text{Cl}$, b. $44-6^\circ$, d_4^{20} 0.8950, n_D^{20} 1.4290 (ozonolysis gave CH_3O and a chloro C_6 -ketone, b. $74-6^\circ$, n_D^{20} 1.4333 (2,4-dinitrophenylhydrazones, m. 114°);

the Cl deriv. is a secondary chloride, i.e., 2,4-dimethyl-3-chloro-1-pentene; with Mg in Et_2O it gave 2,3,7-trimethyl-3-isopropyl-1,3-octadiene, b. $70-1^\circ$, d_4^{20} 0.7841, n_D^{20} 1.4490 (ozonolysis gave HCO_2H and PrCO_2H , as well as a C_6 -diketone yielding a bis(2,4-dinitrophenylhydrazones), decomp. $210-7^\circ$); hydrogenation gave the said analog, b. 84° , d_4^{20} 0.7752, n_D^{20} 1.4310. Heating 44.2 g. $\text{Me}_2\text{CHCHClCMe}_2\text{CH}_2$ with $1-\text{C}_6\text{H}_5\text{MgBr}$ (from 60 g. RBr) 20 hrs. in Et_2O gave 15.4 g. 1-(1-naphthyl)-2,4-dimethyl-1-pentene (possibly with some 3-(1-naphthyl) isomer), b. $130-2^\circ$, d_4^{20} 0.8925, n_D^{20} 1.5735, which on ozonolysis gave $1-\text{C}_6\text{H}_5\text{CHO}$ (semicarbazone, m. 217°); 2,4-dinitrophenylhydrazones, m. $254-5^\circ$), HCO_2H , and $1-\text{C}_6\text{H}_5\text{CO}_2\text{H}$, m. $155-7^\circ$. The results indicate the importance of steric hindrance in the β -position to a C:C link in Grignard reactions. G. M. K.

IONOMARENKO, V.A.

Reaction of the Grignard reagent of 3-chloro-2,2-dimethyl-1-pentene with diisopropyl ketone, ethyl formate and amyl butyrate. V. A. Ionomarenko and T. Ya. Tolbacheva (Inst. Org. Chem. Acad. Sci. U.S.S.R., Moscow). *Izv. Akad. Nauk S.S.R., Otdel. Khim. Nauk* 1953, 1017-23; cf. Wilson, *et al.*, *C.A.* 45, 1007c. — Chlorination of $\text{Me}_2\text{CH}:\text{CH}:\text{CMe}_2$ gave $\text{Me}_2\text{CHCHClCMe}_2$, b_p 40-2.5°, n_D^{20} 1.4223, d_4^{20} 0.8944 (cf. Petrov and P., *C.A.* 46, 874). This (25 g.) in Et_2O with 9.2 g. Mg gave the Grignard reagent (I) which was slowly treated with 17.2 g. (iso-Pr) $_2\text{CO}$, and the mixt. hydrolyzed after 4 hrs. with H_2O ; the org. layer gave 13.8 g. of an alc. $\text{C}_{11}\text{H}_{22}\text{OH}$, b_p 78.5-80.5°, n_D^{20} 1.4320, d_4^{20} 0.8514, which on ozonolysis gave HCO_2H , iso-Pr CO_2H , 0.8018 (semicarbazone, m. 195°); a small amt. of a crude ketone $\text{C}_{11}\text{H}_{20}\text{O}$, b_p 87-66°, n_D^{20} 1.4474, d_4^{20} 0.8018 (semicarbazone, m. 192°), was also obtained. Thus, the Grignard reaction apparently yielded mainly $(\text{Me}_2\text{CH})_2\text{C}(\text{OH})\text{CH}(\text{CMe}_2)\text{CH}(\text{CHMe}_2)\text{CMe}_2$, along with small amount of $(\text{Me}_2\text{CH})_2\text{C}(\text{OH})\text{CH}(\text{CHMe}_2)\text{CMe}_2$. Dehydration of the alc. by heating to 150° with CuSO_4 gave a diene, b_p 70-8°, n_D^{20} 1.4527, d_4^{20} 0.7010, which after hydrogenation first over Pt then over Ni, gave $(\text{Me}_2\text{CH})_2\text{CHCH}_2\text{CHMe}_2\text{CHMe}_2$ (cf. P. and P., *loc. cit.*). I (from 35.5 g. RCI) with 21 g. PrCO_2Am similarly gave after 6 hrs. on a steam bath, followed by ice treatment, 35.5% alc., $\text{C}_{11}\text{H}_{22}\text{OH}$, b_p 142-4°, d_4^{20} 0.8650, n_D^{20} 1.4712, which on ozonolysis gave HCO_2H and iso-Pr CO_2H . Similarly, I (from 35.5 g. I) with 9.8 g. HCO_2Et gave 23% ester, $\text{C}_{11}\text{H}_{22}\text{O}_2$, b_p 111-13°, d_4^{20} 0.9099, n_D^{20} 1.4662, hydrolyzed with MeOH-KOH to HCO_2H and $\text{C}_{11}\text{H}_{22}\text{OH}$, b_p 111-13°, d_4^{20} 0.8710, n_D^{20} 1.4670. While the structures of the products were not established, it was clear that the double bond in I facilitates formation of alcs. in comparison with similarly hindered Grignard reagents based on satd. radicals.

G. M. Kosolapoff

Chemical Abst.
Vol. 48 No. 9
May 10, 1954
Organic Chemistry

LiH or AlLiH_4 similarly gave 60%. $\text{CH}_3\text{CHCH}_2\text{SiCl}_3$, b. 48°, d. 0.8987, n_D^{20} 1.4140. $\text{CH}_3\text{CHCH}_2\text{SiCl}_3$ heated with 3.1 g. Bz_2O , (38 g.) and 72 g. HSiCl_3 heated with 3.1 g. Bz_2O in an autoclave 57 hrs. at 100° gave 63% $\text{CH}_3\text{CHCH}_2\text{SiCl}_3$, b. 228-30°, which (31.5 g.) with 10 g. LiH in $(\text{CH}_3\text{SiCl}_2)_4$, b. 77.9°, d. 0.7276. Bu_2O gave 5.2 ml. $\text{CH}_3\text{CHCH}_2\text{SiH}_3$, b. 77.9°, d. 0.7276, n_D^{20} 1.4235. Analysis of these silanes was difficult and moderately good combustion was achieved only with 10% O_2 -90% N_2 mixt., which still gave low results on Si. The *cyclo chlorid.* $(\text{CH}_3\text{SiCl}_2)_4$, m. 79-81°, obtained from the passage of CH_3Cl over Si-Cu at 300° was reduced similarly. 30 g. chloride and 13 g. powd. LiH in an autoclave gave

2.5 g. $\text{H}_2\text{SiCH}_2\text{SiH}_2\text{CH}_2\text{SiH}_2\text{CH}_3$, b. 134.9°, m. 10°. d. 0.9601, n_D^{20} 1.5059. All are sol. in R_2O and petroleum hydrocarbons. They do not ignite in air and can be stored in ampuls of common glass, although gradual formation of a film on the glass walls is observed. G. M. Kosolapoff

mf

PONOMARENKO, V.A., kand.tekhn.nauk

Natural winding rate of ropes on the drums of hoists and
winches. Sbor.DonUGI no.23:170-175 '62. (MIRA 16:2)
(Mine hoisting)

ONOMARENKO, V.A., kand.tekhn.nauk

Principles of the theory of a track drive with clamps. Sbor.
DonUGI no.23:61-116 '62. (MIRA 16:2)
(Conveying machinery)

PONOMARENKO V. A.

USSR/Chemistry Synthesis

Card : 1/1

Authors : Ponomarenko, V. A., and Mironov, V. F.

Title : ~~Synthesis of certain alkenyl-~~ Synthesis of certain alkenyl- and alkyl silanes and their derivatives

Periodical : Izv. AN SSSR, Otd. Khim. Nauk., 3., 497 - 503, May - June 1954

Abstract : Experimental data are presented on the synthesis of alkenyl- and alkyl silanes and their derivatives (alkenylhalogen silanes, alkylethoxy-silanes, alkylhalide silanes). The ability of diallylsilane to rhodanize with a yield close to the calculated, and the ability of allyl silane to attract HCl, are explained. Data are also presented characterizing the relation between the solidification point of silanes and their structure and it was shown that the refraction magnitude of the Si-C bond is determined by the radical which includes the carbon bound with the silicon. Eighteen references: 12 USA and 6 USSR. Tables.

Institution : Acad. of Sc. USSR, The N. D. Zelinskiy Institute of Org. Chemistry

Submitted : July 17, 1953

hrs. heating) of EtMgBr and $\text{C}_6\text{H}_5\text{CH}_2\text{Cl}$ gave 62.2% $\text{Et}_2\text{SiCH}_2\text{Cl}$, b_p 179°, n_D^{20} 1.4180, d_4^{20} 0.9101. Heating similarly for 9 hrs. the reaction mixt. of EtMgBr from 10 g. Mg and 51.8 g. $\text{C}_6\text{H}_5\text{MgCl}$ gave 81% $\text{Et}_2\text{SiCH}_2\text{Cl}$, b_p 191.6°, n_D^{20} 1.4180, d_4^{20} 0.9101. Similarly (8 hrs. heating) EtMgBr and $\text{C}_6\text{H}_5\text{CH}_2\text{Cl}$ gave 61% $\text{Et}_2\text{SiCH}_2\text{Cl}$, b_p 186.5°, n_D^{20} 1.4180, d_4^{20} 0.9101. EtMgBr from 6 g. Mg and 45.5 g. $\text{C}_6\text{H}_5\text{MgCl}$ was added to $\text{Et}_2\text{SiCH}_2\text{Cl}$, the solvent was removed, and the residue heated on a steam bath 10 hrs., yielding after the usual treatment 67% $\text{Et}_2\text{SiCH}_2\text{Cl}$, b_p 177°, b_p 80-81°, b_p 230-7°, n_D^{20} 1.4180, d_4^{20} 0.9101. G. M. Kobayashi

PONOMARENKO V.A.

USSR/Chemistry Synthesis

Card : 1/1

Authors : Petrov, A. D., Ponomarenko, V. A., and Voykov, V. I.

Title : Synthesis and properties of alpha- and gamma-methylallyl silanes

Periodical : Izv. AN SSSR, Otd. Khim. Nauk., 3, 504 - 510, May - June 1954

Abstract : The synthesis of alpha- and gamma-methylallyl silanes in accordance with the Grignard-Wuertz reactions and by the utilization of crotyl halides, which calls for the study of the allyl regrouping of the halides, is described. The ability of these new type alkenyl silanes (with H-atom in the silicon) to rhodanize in the case of diluted solutions was determined by their chemical properties. The physical properties of unsaturated hydrocarbon silicates compared with the properties of homologous olefins, are given in a table. Eight references: 5 USSR, 3 USA. Table, graphs.

Institution : Acad. of Sc. USSR, The N. D. Zelinskiy Institute of Org. Chemistry

Submitted : July 17, 1953

PONOMARENKO, N. A.

USSR.

New method of synthesis of α -iodoalkyltrialkylsilanes.
V. A. Ponomarenko and V. P. Kironov (N. D. Zelinskii
Inst. Org. Chem., Acad. Sci. U.S.S.R., Moscow). Doklady
Akad. Nauk S.S.S.R. 94: 483-8 (1954).—The reaction of
 $\text{Me}_3\text{Si-MgI}$ with $\text{CH}_3\text{SiCH}_2\text{Cl}$ yields $\text{Me}_2\text{SiCH}_2\text{Cl}$ and $\text{Me}_3\text{Si-CH}_2\text{I}$, the latter apparently formed in exchange reaction of
the chloro deriv. with AlEtCl_2 . Reaction of $\text{Et}_3\text{SiCH}_2\text{Cl}$
with MgI_2 gave 70% $\text{Et}_2\text{SiCH}_2\text{I}$. Higher temp. and
longer reaction time favor the formation of the iodo deriv.
as might be expected. EtMgI yields more iodo deriv.
than does MeMgI . No bromo derivs. are formed, however,
when RMgBr is used. Thus a convenient method for
prepn. of iodoalkyl silanes is obtained. Passage of CH_3 into
refluxing 300 g. $\text{Me}_2\text{SiCH}_2\text{Cl}$ for 22 hrs. while the refluxing
vapor was subjected to ultraviolet irradiation gave 83%
 $\text{CH}_3\text{SiCH}_2\text{Cl}$, b. 117-8.5°. Similarly were obtained: 78%
 $\text{Me}_2\text{SiCH}_2\text{CH}_2\text{Cl}$, m. 120.5-1.5°, and $\text{Me}_2\text{SiCH}_2\text{CH}_2\text{CH}_2\text{Cl}$ (77.2%),
b.p. 113.9°. Heating 200 g. LiCl with 472 g. SiCl_4 and
1.5 g. B_2O_3 to 60-70° yielded a stream of SiH_4 and HCl and
after 2-3 hrs. the mixt. was distd. yielding 50% $\text{Et}_3\text{Si-CH}_2\text{I}$
of a fraction of 14.4% in the distillate and an unreacted yield
of a fraction of 14.4% in the distillate.
 Mg , in 100 g. $\text{Et}_3\text{Si-CH}_2\text{I}$ was slowly added 200 g. $\text{CH}_3\text{SiCH}_2\text{Cl}$
the solvent was removed and the residue heated 4 hrs. on a
steam bath treated with H_2O and HCl and the org. layer
distd. yielding 9 g. $\text{Me}_2\text{SiCH}_2\text{I}$, b.p. 102.5°, and 1.72 and
100.2 g. (52%) $\text{Me}_2\text{SiCH}_2\text{I}$, b.p. 139.5°, and 1.45 and 10
 MeMgI from 48.3 g. Mg was added 95 g. $\text{CH}_3\text{SiCH}_2\text{Cl}$ and 60%

Ponomarenko, V. A.

[illegible]

PONOMARENKO, V. A.

USSR/Chemistry - Chlorination - Alkylation

Card 1/1 : Pub. 22 - 30/46

Authors : Petrov, A. D., Mem. Corresp. of Acad. of Sc. USSR; Mironov, V. F;
Ponomarenko, V. A; and Chernyshev, E. A.

Title : Chlorination of alkylsilane and disilane chlorides and alkylation of
aromatic hydrocarbons by forming halides

Periodical : Dok. AN SSSR 97/4, 687-690, Aug 1, 1954

Abstract : The chlorination of $C_2H_5SiCl_3$, $Cl_3SiCH_2SiCl_3$ and $Cl_3SiCH_2CH_2SiCl_3$
and the process of alkylation of aromatic hydrocarbons by the halides
formed during this process, are explained on the basis of literature
data. It was established that $C_2H_5SiCl_3$ chlorinates into alpha-
and beta-chloroethyl-trichlorosilanes and $Cl_3SiCH_2SiCl_3$, as well as
 SO_2Cl_2 chlorinate into dichloride. Twelve references: 8-USA; 3-USSR
and 1-English (1946-1954). Tables.

Institution :

Submitted : April 31, 1954

PONOMARENKO, V. A.

USSR/Chemistry - Organic chemistry

Card 1/2

Pub. 22 - 20/47

Authors : Petrov, A. D., Memb., Corresp. of Acad of Sc. USSR.; Ponomarenko, V. A.; Mkhitarian, L. L.; and Snegova, A. D.

Title : Synthesis and properties of monochloro derivatives of ethylsilane chlorides.

Periodical : Dok. AN SSSR 100/6, 1107-1110, Feb 21, 1955

Abstract : The synthesis of numerous hitherto unknown compounds from monochloro derivatives of ethylsilane chlorides is reported. The high yield of monochloro derivatives observed during the chlorination of ethylsilane chlorides with chlorine indicates the photochemical chlorine chlorination is no less suitable than the chlorination with sulfuryl chloride.

Institution : Academy of Sciences USSR, The N. D. Zelinskiy Institute of Organ. Chem.

Submitted : August 18, 1954

Periodical : Dok. AN SSSR 100/6, 1107-1110, Feb 21, 1955

Card 2/2 Pub. 22 - 20/47

Abstract : The formation of small amounts of alpha-chloroethyldichlorosilane with highly reactive Si-H bond was observed during the chlorination of ethyldichlorosilane ($\text{Cl}_2\text{HSiC}_2\text{H}_5$). Ten references: 3 USSR, 5 USA, 1 English and 1 German (1937-1954). Table; graphs.

Baduev, M.T.; Rikova, A.D.; Penzhenko, U.A.
 EtCCl₃, 177(0), 178(5), 244(5), 271(5), 332(5), 343(5),
 408(10), 530(10), 697(4), 778(4), 829(3), 931(2), 1056(4),
 1090(1), 1112(1), 1271(2), 1430(4), 1453(4), 1497(0),
 1522(0), 2744(1), 2842(1), 2888(3), 2943(10), 2981(3),
 2983(5), 3009(0). The following assignments are made
 for hydrocarbons: in CH₃, the 2853 line is due to symmetric
 vibration and 2938 is due to antisymmetric vibration (de-
 generate in Me), while in the Me group 2879 is symmetric
 and 2907 is antisymmetric vibrations. The intensity of the
 symmetric vibrations of Me is relatively more intense than
 that of CH₃, indicating greater protonization of the CH bond
 in the CH₃ group. Protonization means the approach or
 penetration of H into the electron orbital of the bond.
 Among the silanes the following assignments are made:
 Me in Et₃Si, 2879, 2940, 2955; CH₃ in Et₃Si, 2908, 2983.
 These frequencies are compared to those in hydrocarbons
 in the light of lower electronegativity of Si in comparison
 with C, which leads to a displacement of electrons toward C
 from the Si atom, but the effect is restricted largely to the
 1st CH₃ groups and has little effect on terminal Me groups.
 The introduction of Cl raises the frequencies of vibration
 within Me and CH₃ groups. In view of the probable elec

tronic distribution, the results of chlorination of silanes can
be explained. Chlorination of Et₃Si results in attack on the
CH₃ groups owing to greater electron d. at these locations;
progressive introduction of Cl atoms in place of Et groups
results eventually in exclusive attack on the Me groups,
owing to the electron-attracting effect of the Cl atoms on Si. a

G. M. Kosolapoff

2/2

BATUYEV, M.I.; PETROV, A.D.; PONOMARENKO, V.A.; MATVEYEVA, A.D.

Optical study of tetraethylsilane, ethylsilane chlorides, and regularities in the chlorination of these compounds. Izv. AN SSSR. Otd. khim. nauk no.9:1070-1078 S '56. (MLBA 9:11)

1. Institut goryuchikh iskopayemykh Akademii nauk SSSR.
(Silane) (Chlorination)

PONOMARENKO, V.A.

BATUYEV, M.I.; PETROV, A.D.; PONOMARENKO, V.A.; MATVEYEVA, A.D.

Optical study of the Si -- H bond and characteristics of
its chemical behavior in various compounds. Izv.AN SSSR.
Otd.khim.nauk no.10:1243-1248 0 '56. (MLRA 9:12)

1. Institut goryuchikh iskopayemykh Akademii nauk SSSR.
(Silicon organic compounds)

ПОНОМАРЕНКО, В.А.

USSR/Physical Chemistry - Molecule, Chemical Bond.

B-4

Abs Jour : Referat Zhur - Khimiya, No 1, 1958, 140

Author : M.I. Batuyev, V.A. Ponomarenko, A.D. Matveyeva, A.D. Snegova.

Inst : Academy of Sciences of USSR

Title : Cis-Trans-Isomerism of 1,2-Di-(Trichlorsilyl) Ethylene.

Orig Pub : Izv. AN SSSR, Otd. Khim. n., 1956, No11, 1420-1421

Abstract : Cis- and trans-isomers of 1,2-di--(trichlorsilyl) ethylene (I) were detected by the spectrum of multiple scattering. The range width (43 cm^{-1}) between the determined frequencies of double links C C of the cis- and trans-isomers of I, unusual as compared with cis- and trans-isomers of other compounds, was noted.

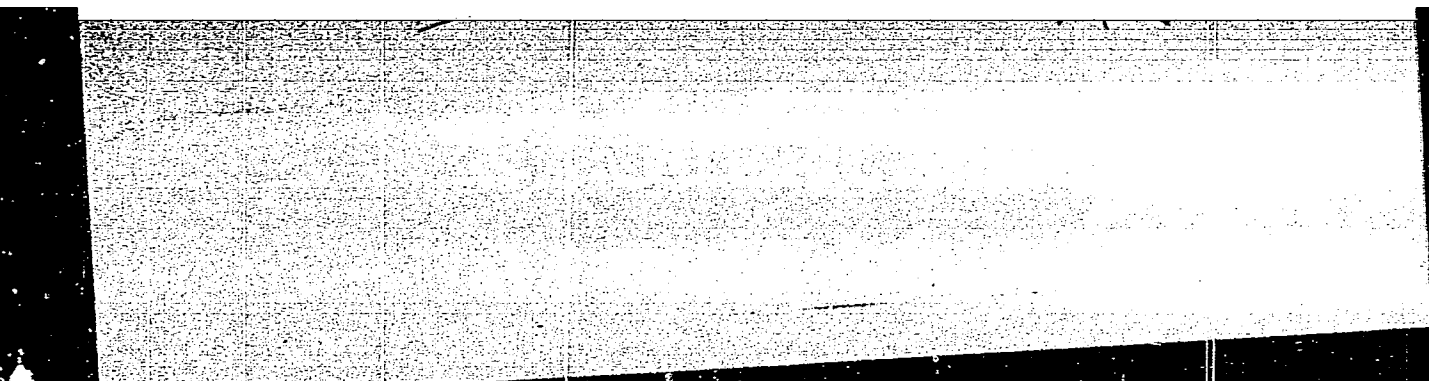
Card 1/1

Inst. Org. Chem., AS USSR

✓ Optical study of factors which condition the reaction of
β-cleavage of organosilicon β-halides. M. I. Batury, A. D.
Petrov, V. A. Ponomarenko, and A. D. Matveev. *Zhur.*
Obshch. Khim. 26, 2350-56 (1956).—Examin. of Raman spec-
tra of a number of organosilanes (11 references) indicates
that the cleavage of such substances is conditioned
by the nature of the substituent R and the nature of the
halogen X. The cleavage of $\text{SiCH}_2\text{CH}_2\text{Cl}$ derivatives is apparently
of a structural nature. The study demonstrates the
interaction of steric and electronic factors in the
2-position. Numerous examples of derivatives of
organosilanes and organosilanes are given.

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CIA-RDP86-00513R001342110016-2



APPROVED FOR RELEASE: 06/15/2000

CIA-RDP86-00513R001342110016-2"

Ponomarenko, V. A.

USSR/Chemistry - Organic chemistry

Card 1/1 Pub. 22 - 20/43

Authors : Ponomarenko, V. A.; Sokolov, B. A.; Minachev, Kh. M.; and Petrov, A. D.
Memb. Corresp. of AN SSSR

Title : Addition of methyldichlorosilane and ethyldichlorosilane to allyl halides

Periodical : Dok. AN SSSR 106/1, 76-79, Jan 1, 1956

Abstract : The possibility of adding to allyl halides (allyl chloride, metalyll chloride, etc) compounds more complex than silico-chloroform (HSiCl_3) - silane hydrides - such as methyldichlorosilane and ethyldichlorosilane in the presence of platinized carbon, was investigated. It was found that both silanes in the presence of platinized carbon containing 1% Pt at 160° attach themselves to the allyl- and metalyll chlorides forming homologous gamma-chlor-alkylalkyldichlorosilane. Other products formed as result of this addition reaction are described. Twenty-one references: 13 USA, 4 USSR, 3 Eng. and 1 French (1947-1955). Graphs.

Institution : Acad. of Sc., USSR, Inst. of Organ. Chem. im. N. D. Zelinskiy

Submitted : July 29, 1955

PONOMARENKO, V.A.; SNEGOVA, A.D.

Photochemical chlorination of ethylsilane fluorides. Orienting
effect of fluorosilyl groups. Zhur. ob. khim. 27 no.8:2067-2073
Ag '57. (MIRA 10:9)

1. Institut organicheskoy khimii Akademii nauk SSSR.
(Fluorine organic compounds)

PNOMARENKO, V.R.

PETROV, A.D.; SADIKH-ZADE, S.I.; PNOMARENKO, V.A.; SOKOLOV, B.A.;
YEGOROV, Yu.P.

Reaction of some γ -chloralkylsilanechlorides with silicon under
condition of forward synthesis. Zhur. ob. khim. 27 no.9:2479-2486
S '57. (MIRA 11:3)

1. Institut organicheskoy khimii AN SSSR.
(Silicon) (Chemistry, Organic--Synthesis)

Ponomarenko, V. A.

Synthesis and properties of some organosilicon compounds.
 8-hydroxy-2-methyl-2-phenyl-1,3-dioxane
 Ponomarenko, V. A. & Surikova, L. I. *Dokl. Akad. Nauk SSSR*
 197, 9-12, 1967. -To Girgava reagent from 8. M.
 SiCH₃Cl in EtOH was added 10 g. 8-hydroxy-2-methyl-2-phenyl-1,3-dioxane
 by refluxing and the usual treatment. Unreacted 8-hydroxy-2-methyl-2-phenyl-1,3-dioxane
 by 57% and 70% respectively, showing in the IR spectrum.

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CIA-RDP86-00513R001342110016-2

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CIA-RDP86-00513R001342110016-2"

7
A study of some metals of group VIII as catalysts in the
reaction of addition of alkylchlorosilanes to unsaturated
compounds. A. D. Petrus, Kh. M. Minachev, V. A.
Ponomarev, B. A. Sokolov, and G. Y. Odabashov. N.
D. Zelinskii Inst. Org. Chem. Acad. Sci. U.S.S.R., Mos-
cow). *Doklady Akad. Nauk S.S.S.R.* 112, 273-5 (1957);
cf. C.A. 50, 13726c, U.S. 2,632,013 (C.A. 48, 2760a;
and U.S. 2,627,732 (C.A. 47, 8254b). In a model reaction

PONOMARENKO, V. A.,

"Synthesis of Several Fluorinated Organosilicon Compounds," paper submitted at the Symposium on Organic and Nonsilicate Silicon Chemistry on 12th-14th May 1958, Dresden.

1. The possibility will be discussed of preparing different types of fluorinated organosilicon compounds by the addition of hydrosilanes to fluorinated olefins and unsaturated fluorinated esters in the presence of platinum catalysts.
2. It will be shown that by the use of fluoroethylenes ($\text{CF}_2=\text{CF}_2$, $\text{CF}_2=\text{CFCl}$, $\text{CF}_2=\text{CH}_2$) in this manner, telemerization is induced.
3. It has been determined that the velocity of the reaction as well as the yield of addition product depend not alone on the structure of the reacting hydrosilane but also on the type of catalyst and the experimental conditions.
4. It has been determined that the fluorosilyl and fluoromethyl groups exert similar orientating and stabilizing effects during chlorinations and dehydrochlorinations.

Abstract: B-3,108,944 (Encl.)

AUTHORS: Ponomarenko, V. A., Yegorov, Yu. P., Vzenkova, G. Ya. 62-1-7/29

TITLE: On the Production and the Properties of Some Alkylsilane-Deuterides
(Polucheniye i svoystva nekotorykh alkilsilandyteridov)

PERIODICAL: Izvestiya AN SSSR Otdeleniye Khimicheskikh Nauk, 1958, Nr 1, pp. 54-58
(USSR)

ABSTRACT: Among the great number of the various silicon-organic compounds hitherto obtained only some are to be found which contain in their composition beside hydrogen also its isotopes (deuterium and tritium). Among other it was of interest to investigate for the synthesis of the alkylsilane-deuterides the possibility of application of the deuteride of lithium (LiD) as the latter has hitherto not been used for the synthesis of the silanedeuterides. This presupposes, however, an alteration of the method of synthesis. Table 1 shows the properties of the obtained deuterides. There let see that the substitution of hydrogen in silicon compounds by deuterium exercises almost no influence on the boiling temperature of these compounds. Practically also the refraction index remains constant. Only the specific weight is considerably increased. It is assumed that the quantity of the binding refraction Si-D amounts to an average of 3,23 ml/molecule and thus is very similar to the binding refraction Si-H (according to Warrick 3,20 ml/molecules (reference 19). Data referring to the ex-

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On the Production and the Properties of Some Alkylsilane-Deuterides 62-1.9/29

perimental conditions are shown in table 2. The reduction of the alkylsilanechlorides to the corresponding deuterides occurs under already earlier described conditions. Summary: 5 new alkylsilanedeuterides were obtained and their physical properties investigated. It was found that the frequency of the valence oscillations of Si-D extend to the range of from $1530 - 1570 \text{ cm}^{-1}$ and that it decreases correspondingly to the reduction of the atomic number of D in Si. There are 2 tables, and 24 references, 2 of which are Slavic.

ASSOCIATION: Institute of Organic Chemistry imeni N. D. Zelinskiy of the AS USSR (Institut organicheskoy khimii imeni N. D. Zelinskogo Akademii nauk SSSR)

SUBMITTED: July 20, 1956.

AVAILABLE: Library of Congress

1. Alkylsilane-Deuterides-Synthesis
2. Alkylsilane-Deuterides-Properties

Card 2/2

AUTHORS: Ponomarenko, V. A., Cherkayev, V. G., 62-2-26/28
Petrov, A. D., Zhdorozhnyy, N. A.,

TITLE: H₂ PtCl₆ as Catalyst in the Addition Compound Reaction of Silane Hydrides With Unsaturated Compounds (Platinokhloristovodorodnaya kislota kak katalizator v reaktsii prisoyedineniya gidridsilanov k nepredel'nyy soedineniyam)

PERIODICAL: Izvestiya AN SSSR Otdeleniye Khimicheskikh Nauk, 1958, Nr 2, pp. 247-248 (USSR)

ABSTRACT: In earlier reports (references 1-4) the authors already dealt with the problems of the selection of catalysts for the addition compound reaction of silane hydrides with olefines as well as with the investigation of the reaction itself. A paper (reference 5) already touches upon these problems and some of the conclusions are in agreement with those obtained by the authors in this work. One of the most important observations in the above-mentioned paper consists of the discovery of the increased catalytic activity of the investigated reaction of H₂PtCl₆ in comparison with other catalysts of a metal basis (eighth group). In the present paper the authors describe the performed addition

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H₂PtCl₆ as Catalyst in the Addition Compound Reaction of Silane Hydrides With Unsaturated Compounds

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tion CH₃SiHCl₂ with ethylene, propylene and acetylene in the presence of chloroplatinic acid (at room temperature) and that with CH₂=CF₂ and CF₂=CF₂ at 160°C. It was further found that in comparison with platinum on the carriers the chloroplatinic acid (in the case of CH₂=CF₂) increases the yield of the products of the addition by the 3-4 fold amount. In the case of CH₂=CH₂, CH₂=CH-CH₃ and CH≡CH an almost quantitative yield is obtained. There are 2 tables, and 7 references, 6 of which are Slavic.

ASSOCIATION: Institute for Organic Chemistry imeni N.D. Zelinskiy AN USSR (Institut organicheskoy khimii im. N.D. Zelinskogo Akademii nauk SSSR)

SUBMITTED: October 12, 1957

AVAILABLE: Library of Congress

1. Silane hydrides--Chemical reactions
2. Olefines--Chemical reactions
3. Chloroplatinic acid catalyst--Applications

Card 2/2